

THE SONOMA COUNTY Farm Bureau Monthly

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VOLUME 2

SANTA ROSA, CALIFORNIA, APRIL, 1920

NO. 4

Henry A. Weinland is New Sonoma County Farm Advisor

Henry A. Weinland, the newly appointed Farm Advisor of Sonoma county, is a native of Iowa. He came to California when a very young man and settled on a ranch at Banning, Riverside county, where he attended school, graduating from the Riverside High School. His vacations, as would be expected, were spent in agricultural pursuits. In 1909 he graduated with the degree of Bachelor of Science from Pomona College. He then took up the occupation of High School teacher at National City, San Diego county. The summer of 1910 was spent at the University of California summer school and in the fall he moved to Santa Rosa, where he became principal of the Fremont school. He remained here for a year and was then called to Sacramento as Assistant Superintendent in the State Insectory under the State Commissioner of Horticulture. During this period he was employed on special entomological work, visiting the Hawaiian Islands to collect

beneficial insects. He remained for two years in the State service and then returned to San Diego county as County Horticultural Commissioner and Secretary of the San Diego County Farm Bureau. After two years service in this capacity he was appointed Farm Advisor of San Diego county. He has been steadily advanced in this position and in 1919 was given the title of Assistant Professor of Agricultural Extension.

This brief summary will convey a little idea of Mr. Weinland's wide range of experience and qualifications for Farm Advisor of Sonoma county. He has several times expressed a desire to return to Sonoma county in some capacity as he was always appreciative of this section, one of the reasons perhaps being that while here he became acquainted with and married a Santa Rosa girl. Mr. Weinland will move with his wife and three children to Sonoma county about May 1, when he will actively take charge of the work of Farm Advisor.

this time to thank you for it. I greatly regret that pressure of other business compels me to decline the office."

Mr. Denman's resignation was accepted with regret, and Vice-President Sheridan W. Baker took the chair. Mr. E. D. Seaton and Mr. Wm. H. Hotle, newly elected directors-at-large, were seated.

The appointment of a permanent Farm Advisor for Sonoma county came up for discussion and Prof. B. H. Crocheron, State Leader of Farm Advisors, suggested the name of H. A. Weinland, now Farm Advisor at San Diego. Professor Crocheron gave a brief account of Mr. Weinland's work in San Diego county, pronouncing Sonoma county fortunate in having the chance to get a man of his experience and ability. The directors agreed to give Mr. Weinland their cordial support, should he be appointed, and sent a wire to him inviting him to come to this county and expressing their desire to co-operate with and support his work.

Professor Crocheron presented the matter of a Sonoma county wool pool as a means of getting better treatment and prices for the local growers. A committee was appointed to investigate this matter, consisting of B. B. Hinshaw of Bloomfield, Carl Haehl of Cloverdale, and Paul Rued of Santa Rosa.

The following persons were chosen as delegates to represent the Farm Bureau in the Farm Bureau traveling conference; W. H. McCutchan, J. R. Gallagher, and C. E. Humbert. Alternates: George P. Dillman and Wm. F. Holmes Jr.

Special Notice to Delinquent Members

The Farm Bureau Monthly is entered under second class mailing privileges. According to postal regulations, the Farm Bureau Monthly cannot be sent out to delinquent subscribers, so this will be the last issue you can receive unless your membership dues are received at once. If this notice is marked with a blue pencil you will know that your membership in the Sonoma County Farm Bureau has expired and that this will be your last copy until your dues are paid.

RENEW YOUR MEMBERSHIP NOW

Date.....

Mr. J. P. McConnell, Sec'y-Treas.
Sonoma County Farm Bureau,
Santa Rosa, California.

Enclosed please find check for Two Dollars (\$2.00) as my membership dues for 1920, 25 cents of which is to be applied as a year's subscription to the Sonoma County Farm Bureau Monthly and One Dollar (\$1.00) as State and National dues.

Name.....

Address.....

FARM BUREAU DIRECTORS' MEETING

The March meeting of the Sonoma County Farm Bureau directors was well attended and full of interest. Besides thirteen directors, there were present five farm center secretaries and six other visitors.

Mr. John R. Denman, newly elected Farm Bureau president, called the meeting to order but immediately tendered his resignation as follows:

"I hereby tender my resignation as president of the Sonoma County Farm Bureau, to take effect immediately. I deeply appreciate the honor given me and want to take

PURE BREEDS PAY IN POULTRY

That the value of pure-bred males counts as much in poultry raising as in stock raising is shown by the records of three flocks of Leghorns at the North Carolina Experiment Station. Flock No. 1, the egg production of which is shown in these records, consisted of common hens; flock No. 2 was produced by breeding these hens to common males; flock No. 3 was produced by breeding flock 1 to a rooster from high producing hens. The following year flock 1 laid 89 eggs to the hen; flock 2 laid an average of 88 eggs per hen; flock 3 laid an average of 136 eggs per hen. This increase of 54 per cent in one year tells very specifically the benefits in the use of pure-bred males.

THE SONOMA COUNTY FARM BUREAU MONTHLY

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Santa Rosa

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Santa Rosa

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.....Melvin W. Buster
Courthouse, Santa Rosa
Asst. Farm Advisor..Henry P. Everett
Courthouse, Santa Rosa
Office Secretary.....Miss E. S. Fisk

KNOCKER OR BOOSTER?

When the Creator had made all the good things, it seemed there was still some dirty work to do, so He made the beasts and the reptiles and the poisonous insects; and when He had finished He still had some old scraps left over that were too bad to put into the Rattlesnake, the Hyena, the Scorpion, and the Skunk; so He put all these to-

SONOMA-MARIN COW TESTING ASSOCIATION FEBRUARY, 1920

Number of Cows producing 40 pounds or more of Butterfat:

Owner	No.	Average per Cow	Record of one Best Cow			
			No. of	Lbs.	Per cent	Lbs.
			Name	Milk	Test	Fat
Q. V. Sillacci—Hol.....	27—2	40.80	7	1140	3.6	41.04
U. J. Martinelli—Hol.....	59—3	41.56	54	1154	3.7	42.69
Mrs. Mabel Putnam—Hol.....	10—2	47.18	4	1493	3.5	52.25
M. Carr—Jer.	8—2	43.73	8	951	4.7	44.69
D. McClure—Jer.....	19—6	47.61	19	1108	5.1	56.51
A. H. Jacobsen—Dur.....	20—2	43.41	12	1012	4.5	45.54
R. J. Craig—Jer.....	28—13	47.69	27	1731	4.1	70.97
H. Barnes—Jer.....	27—8	48.17	13	1218	4.9	59.58
A. J. Volkerts—Dur.....	26—3	41.06	Cherry	763	5.5	41.96
A. J. Petersen—Jer.....	37—6	42.65	Emma	1015	4.3	43.64
Paul Martin—Jer.....	14—3	49.77	5	841	6.2	52.14
C. C. Boysen—Hol.....	39—4	46.70	22	1340	3.4	45.56
A. Purcine—Jer.....	27—11	46.52	4	870	7.0	60.90
F. H. Doss—Jer.....	15—2	41.26	7	818	5.1	41.72
C. Nisson—Jer.....	17—5	45.23	Spot	983	5.0	49.15
W. B. Mordecai—Jer.....	38—10	45.62	21	766	7.0	53.62
A. Bloom—Ayr.....	65—5	43.75	61	1061	4.4	46.70
H. J. Dado—Hol.....	25—5	49.38	4	11.60	5.5	61.48
A. Respini—Ayr.....	46—3	40.47	45	977	4.2	41.03
D. D. McIsaacs—Hol.....	67—14	44.58	6	1740	3.2	55.68
E. J. Fillippini—Jer.....	39—5	47.20	16	1073	5.5	59.01
S. J. Dado—Hol.....	51—1		51	1230	3.4	41.82
C. Danielli—Jer.	18—1		18	1021	4.4	44.92
C. Jonasen—Dur.	17—1		14	954	5.0	47.70
W. T. Roberts—Dur.....	15—1		16	1015	4.1	41.61
Ivan Stice—Jer.	22—1		23	696	6.2	43.15
H. R. Doss—Jer.....	10—1		2	1116	4.0	44.64

EXPLANATION—The figures in the first column 27—2, etc., means that 27 were tested and 2 produced 40 lbs. or more butter fat.

AVERAGE—Indicates the average of the 40 lb. or better, cows.

Most of the herds are mixed herds and in the column indicating the breed we credit to the breed of the one best cow.

There are thirty-five herds in the association, a total of 1173 cows tested in February. Twenty-seven herds as shown above contain cows having one or more 40 lb. cows, eight herds had none.

The number of cows in the 40 lb. class is 120 which is a fraction more than 10 per cent of the total under test.

February was a short month which affected the percentage some, but it is quite evident that there is plenty opportunity to practice the slogan, BREED, FEED and WEED.

R. L. PEDROTTI, Tester.
W. B. HOPKINS, Secretary.

gether, covered it with suspicion, wrapped it with jealousy, marked it with a yellow streak, and called it a KNOCKER.

This product was so fearful to contemplate that He had to make something to counteract it, so He took a sunbeam, put into it the heart of a child, the brain of a man, wrapped it in civic pride, covered it with brotherly love, made it a believer in equality and justice, a worker for and supporter of every good thing in the community, and called it a BOOSTER; thenceforth mortal man has had the privilege of choosing his associates.

The Sonoma County Farm Bureau needs boosters.

AN ODE TO BRINDLE

Goodbye, old Brindle, bony scrub,
The times demand a better breed;
You eat enough; but there's the rub
You never pay for half your feed.

So after all these years we part,
But pray, remember as you go,
If this should break your bovine heart,
You broke my purse, long, long ago.
—Western Farmer.

CLEAN DAIRIES

It is very essential that dairy barns should be kept clean. Clean milk is necessary for the consumer apart from his taste in the matter to guard him against bacterial infection carried by dirty milk. This is especially true in the case of children who may even be infected with tuberculosis from milk handled in dirty surroundings. Clean milk cannot be produced in unsanitary barns. Many consumers feel that they do not care to feed themselves or their children the products coming from such dirty places as some of the dairies which may be found in many dairy sections.

The use of concrete and steel stalls and mangers, floors that can be flushed out with a hose, proper drains, milking machines, etc., go a long way toward insuring clean milk. In the end they save time which is money, to say nothing of the personal satisfaction. Besides cleanliness is quite a stimulus to industry and a dairy with a clean appearance is good advertising.

Dairymen should come to realize that, aside from other reasons, it is a poor policy to run a dirty dairy.

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CONTROL THE WEEDS

(O. E. BREMNER)

Do we realize the immense loss sustained each year through the agency of noxious weeds in our gardens, orchards, farms, and pasture lands? Some one has placed this loss at ten per cent of all the products of the farm. While this may be about the right average figure, we believe that in such sections as we possess on our west coast here the damage to the grazing lands from the direct loss of feeding areas occasioned by such weeds as dandelion will run as high as 25 per cent. Such weeds as this have either replaced or driven out the better feed grasses which originally grew in this section. More than this is the indirect loss where gophers have appeared to feed on the dandelion and in so doing have destroyed much of the other natural grasses. Their mounds have rendered barren a large percentage of this land. The problem before us today is how to eradicate both weeds and gophers and to re-seed these areas.

When it comes to our orchards and farms, it is probable that the worst weed we have to fight is morning glory. It not only saps the fertility of the soil, thus robbing the plant of its nourishment, but it also depletes the moisture content of our soils. Two methods have been advocated for its control. One, the cultivation method, gives good success when practiced religiously. It consists of cutting the weeds about four inches beneath the surface on the average of once every seven days during the growing period. The idea is never to allow the morning glory to have a green leaf start above the surface. This will effectively check the weeds so that in some cases it will not make its appearance again for two or three years. The chemical method is by the use of an arsenical, either soda arsenic or some prepared spray just before the frost time in the fall. It is best used during the foggy period and must not be applied too strong. Our experiments last year with this spray seem to demonstrate the fact that we used it too strong. It killed the tops and the roots down for a few inches. In some cases it killed as deep as 12 or 14 inches but in most cases it simply killed it down for two or three inches. It should be applied so that it will gradually be absorbed by the plant, the killing period extending for a week or so. This is the most economical and satisfactory way to eradicate morning glory and we expect to continue the treatment this fall.

Johnson grass is a common pest along our river bottoms and can be eradicated by the same treatment as given morning glory. It is easier, however, to control than morning glory and requires less cultivation, the principal thing being to keep it down so that it will not form a head. This prevents the formation of the root stock which carries over the plant for the next year. The second year of cultivation will see a complete clean-up. Of course, where land has been heavily seeded for years the small

plants will come up and these must be cultivated and killed. In the case of Johnson grass in orchards it is undoubtedly better to use the cultivation method rather than resort to the spray. If the spray is used, two or more applications are necessary.

Other weeds which are almost as detrimental as these and at least unsightly are the large milk thistle, the bull thistle, and the teasle. These three are similar in character and can be controlled by cultivation. They need only to be cut below the crown which kills the plant. They are prolific seeders and the ground must be worked to keep the small plants from growing.

Bermuda grass is another pest which infests our orchards and is about as hard to control as morning glory, the principal trouble being that each joint of the root forms a new plant and cultivation alone, unless intensively done, will hardly eradicate it. The spray method may be used effectively against Bermuda.

Among other weeds which are bothering us is the so-called Yellow Star thistle which bids fair to be one of the worst pests we have. The Yellow Star thistle is an annual which grows from seed each year and it is therefore impossible to control if it is allowed to seed. This may be prevented in grain fields by cutting the tops and then burning the fields. One good method is to use the new sulfur weed torch which not only burns up old thistles but kills the new ones. Dry plowing in the fall and cultivation will do much towards eradicating Yellow Thistle. It is a tremendous seeder and, of course, must be controlled over a number of years. There is no question but that we must commence a campaign on this weed as it is rapidly taking over our grain lands and rendering them unfit for pasture after taking off the hay; it is also growing in our pasture lands and destroying their feeding value.

We have some other destructive weeds, as May weed, which is common to our grain lands, and should be controlled by the destruction of the plant before it seeds.

Two plants in our coast area which are giving us some trouble are the Yellow Cytisus, a near relative to the broom, and the Irish Firze. These are not, technically speaking, weeds but shrubs. These two plants are very destructive to pasture and tax the land. They should not be allowed to spread. The best method of eradication in this case is grubbing for the firze, plowing the land after grubbing, and sowing to some other crop. In case of the Cytisus, they should be pulled and then plowed.

Many weeds such as sorell and dock are of themselves of no great importance in our orchards but they carry insects injurious to our trees and on this account should be eradicated. These two indicate an excess of moisture and acidity of the soil so that proper drainage, cultivation, and lime would be the remedy.

The best weed remedy of all is prevention and this can only be accomplished by planting clean seed. Never

plant alfalfa or other perennials without testing for foul seeds.

Examine carefully your grain seed and have that tested. The best seed is always the cheapest and weed seed is prohibitive at any price.

It is time for the farmer to realize how expensive it is to let the weeds enumerated here and others which may be as destructive, to grow on his place and all should unite in a general campaign to clean up fence lines or waste areas where these weeds are allowed to accumulate. Our land is too valuable to have it taken over by weeds and certainly no better investment could be made than by their destruction. We hope that the growers will co-operate with the Horticultural Commissioner this year in a general campaign for the eradication of all weeds.

TILLAGE OPERATIONS FOR MOISTURE CONSERVATION

By D. E. MARTIN

The late rains which we have enjoyed during March and which give promise of continuing into April should not obscure in our minds the very great importance of conserving every bit of moisture for our orchards, vineyards, and summer crops. The low seasonal total rainfall, following as it does two relatively dry years, means that the underground reservoirs are low and our reserve supply far below normal. This will mean more or less serious lack of moisture during the late summer and fall.

For bearing orchards particularly, the importance of an adequate moisture supply after the crop has reached maturity must be kept in mind. Without it the tree cannot properly mature its new wood and, what is more important, cannot store up food and set fruit buds for next year's growth and crop. The effect of lack of moisture in the fall is seen in light harvest the following season. To insure moisture at this critical period, farseeing orchardists are, wherever possible, installing pumping plants and preparing for irrigation to the greatest extent possible. Even in years of normal rainfall, and in spite of the prevailing idea in this county that no irrigation is necessary, one or two applications of water during the early summer and again following the crop harvest if we do not have early fall rains, would increase both the quantity and quality of our fruit to an extent that would amply repay the cost and trouble. Santa Clara Valley orchardists have demonstrated that this practice is a sound one, particularly with prunes, and we can well follow their example even if we are more fortunately situated in respect to average yearly rainfall.

The greatest factor in maintaining a constant supply of moisture throughout the summer is an efficient dust mulch from four to six inches deep. To retain its efficiency this mulch on many soils must be stirred two or three times during the summer with a disk, spring tooth, or spike harrow.

A great deal of ground was plowed

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early in January or February this year and in order to work up a good mulch, deep cultivation is essential. The disk harrow is probably the best tool in most cases and if weighted down will do just as good a job as a second plowing. The practice of plowing twice should be discouraged as far as possible as it tends to destroy the organic matter which is so vital to the maintenance of fertility. On some soils, particularly on vineyard and poorer hill soils, two plowings are often necessary and this system is also often advisable to properly fit land for tomatoes and hops. But its use in general orchard practice is questionable. On land which is to be plowed twice in the spring the first plowing should, if possible, be shallow and the second deep.

A practice which is too seldom followed and which would do a great deal towards more efficient moisture conservation, is that of following the plow as soon as possible with the harrow. This is almost essential where much cover crop is turned under. Too often we plow our whole orchard and then find that the first plowed has dried out and will not work down in good shape. The ideal system is to plow only as much each day as can be worked down before night. Practically this is not always possible but in most cases plowed ground need not lie rough for more than one or two days. The "Culti-packer" type of roller is a very useful tool in orchard practice, particularly where deep plowing has been done. This tool is much to be preferred to flat rollers or plank drags on our silt loam, loam, and fine sandy loam soils. Numerous cases have been seen where ordinary rollers or drags have so finely pulverized and packed down these soils that contact has been re-established with the moist soil below, capillary action started and the efficiency of the mulch entirely destroyed. The "Culti-packer" stirs the soil as it rolls but even its use can be overdone. On heavy clays, adobes, coarse sandy loams, and sands the flat roller and plank drag do very satisfactory work.

A word on the adobe soils may not be out of place as the adobe owner has a problem all his own. Very deep plowing in adobe is advisable as a rule only in the fall or early spring. Shallow plowing is preferable late in the spring, particularly if a summer crop or intercrop is to be grown. There is truth in the saying that adobe dries out as deep as it is plowed. If adobe is plowed when fairly dry so that it turns up in chunks, a disc harrow is the best tool to work it down, followed by a roller to break up the clods. If plowed fairly wet or in prime condition, the disc will often work it up too fine and tend to pack it down instead of forming a loose mulch. A spike harrow, following the plow, is much to be preferred to a disc in this case. A springtooth harrow followed by a roller is also a good combination for handling adobe following the plow. A word as to our old friend the morning glory. It is particularly nec-

essary to keep it below the surface in a dry year as it will compete seriously with trees for moisture. The "Cyclone" type of weeder is a most useful tool to handle this pest and in addition forms an almost perfect mulch. Its use every seven to ten days during the summer will be well repaid on morning glory land.

More and more of the progressive farmers of Sonoma county are buying tractors because they find that they can do a better job, do it in less time, and everything considered, do it at less expense than by the old system. Particularly where cover crops are to be handled is the tractor indispensable. The crop can be turned under deeper, covered over and packed down much better, and the whole job handled in a much shorter time than if attempted with horse-drawn implements. In a year of scant rainfall time is a very important factor in preparing the most efficient mulch for moisture conservation. All the money, time, and trouble invested in securing a plentiful supply of moisture throughout the season will be well repaid not only by this year's crop but also, which is just as important, by next year's returns.

RAISING CHICKS

By E. O. HUSSEY

Director Cinnabar Farm Center

In starting this article I wish to give credit to Captain Tullett, as I copied part of his system, and also to Dr. J. E. Tierney, who helped me figure out the feeds from a digestive point.

There are two very important ideas in this system of raising chicks; one is to prevent sickness, and the other is to eliminate work. I think you will all agree that any system which will do these things is the best that has been discovered up to the present. I even go so far as to claim that a sick bunch of chicks in a great many cases can be cured by this system. It has worked out equally well with a hover system and stove system of brooding. In my own case I use electric hovers.

When the chicks are about 50 to 56 hours old, I let them out on sharp sand and give them milk to drink, putting enough fountains in the runway so that each chick will be sure to get a chance to drink; I have found the best fount to start chicks with to be one with four points that screws onto a mason fruit jar. Sour milk or buttermilk is the best form of milk. When chicks are about 60 hours old, I sprinkle light bran on the sand for them to pick at; a couple of hours later I repeat this, and after this I feed about every two hours, gradually adding commercial chick feed to the bran until about the second day when they get no more bran. Also sprinkle charcoal on the sand for the first couple of days; after that keep charcoal in a hopper always available. After the second day cover the floor about two inches deep with chopped

alfalfa and feed the grain in this until the chicks get so they can go over the eight-inch board into the deep litter. This will be the fifth day. Put a runway up so they can all get over and back. In this eight-inch litter put a couple of sacks of chick feed so that part of it is within two inches of the surface. At this time you can discard the small fountains and use long troughs for the milk. The chicks should get nothing to drink but milk until at least two months old. Put a hopper of grit and ground eastern oyster shell in the runway.

6 ft.		6 ft.	
14 ft.	Hover	8 in. board removable	Chopped Alfalfa 1 part
	Sand		Chopped Straw 4 parts
	Alfalfa 2 in.		Total 8 inches
	Deep		Deep

From this time on you have no feeding to do except greens which should be started when the chicks are a week old. I let my chicks on the ground when they are a week old and they are out every day after that and stay out till they get ready to go in themselves.

The only cleaning will be in the hover compartment; the side with the deep litter never has to be cleaned out as it never gets dirty. You will have to watch the feed in the litter and when it gets low scatter another sack or two in it and fork it under with a pitchfork.

When the chicks are about three weeks old, lay a couple of 2-inch by 4-inch pairs across the top of the hover and across these lay 1x2 roosts about six inches apart. In this way the chicks learn to go on roosts above a dropping board.

THE COMPOST HEAP

A large part of the value of manure is due to the effect of humus. The small rancher, with a cow or horse, could greatly increase the amount of humus by developing a compost heap. It is suggested that all the leaves, weeds that do not bear objectionable seeds, pieces of sod, clippings from the lawn, straw, hay, and the like, that are lying around loose, be placed together as a layer of dry material. In the course of a year this heap would not only increase the amount of fertilizer available, but would prevent the loss of the most valuable portion of the manure pile—the fluid portion—due to leaching. The layer of dry stuff would absorb what would otherwise run off and soak into the ground. The high prices of manure fertilizer should make this valuable by-product one well worth conserving.